

REQ. AGENT

RAND NO.

ACQ. AGENT

ARIEL 1

COSMIC RAY DATA

62-015A-03A

This data set has been restored. The DR and DS tape are 9 track, EBCDIC, and multi-filed. The DR tape is a 3480 cartridge and the DS tape is 6250 BPI. The DR, DS, and DD numbers along with the time spans are given as follows:

DR # -----	DS # -----	DD # -----	FILES -----	TIME SPAN -----
DR02946	DS02946	D-00246	595	04/27/62 - 07/12/62

1962-015A 03A

D-246 C-1556

ARIEL 1IMPERIAL COLLEGE DATA TAPE

This tape has 595 files of data written in BCD at a density of 556 bits per inch. The files are in chronological order, each file representing data obtained from one orbit.

Each file consists of several records of data followed by an END OF FILE record.

Each record is a fixed length of 2460 characters, 410 words, consisting of a heading followed by lines of data in the format shown below. There can be a maximum of 81 lines of data in a record and any unfilled locations are padded with zeroes until the record is 2460 characters long.

The record heading contains 25 characters :-

I3	Day number
I2	Number of lines in the record (i.e. 81 or less)
I5	First time in seconds
I5	Last time in seconds
6X	Blank
I2	Number of blanks in the cerenkov
I2	Number of blanks in the geiger

One line of data contains 30 characters :-

T	G	C	D	B	H	LAT	LONG
5	4	3	1	2	4	5.1	6.1

where the symbols are represented as follows

T	Time in seconds
G	Geiger counting rate
C	Cerenkov counting rate
D	Discriminator level mark
	0) unattenuated level
	1) attenuated level
	8) when the level has just switched
	9) from one to the other.
B	Shows data gaps in the geiger and cerenkov data
	= 90 if gap in cerenkov data = 09 if gap in geiger data.
	When data gaps are indicated as above the geiger and/or cerenkov counting rates are set to 9999 and 999 respectively.
H	Height in kilometers
LAT	Geographic latitude
LONG	Geographic longitude